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James Rohl

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EXAMINER

NGUYEN, PHONG H

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 10, 12, 64 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over the Tsubota (5,361,660) in view of Lyon (2,821,156).

Tsubota discloses placing sheet A between punch 3 and die 7, 11; die hole is in the center of element 7, through which punch 3 passes; delivering lubricant via element 21 as shown in figure 1; actuating the punch as shown in figure 2; the element A in figure 2, which is shown passing through elements 7 and 11 is considered to be an electrode layer for a flat capacitor; the sheet is aluminum as disclosed in column 4, line 31; aluminum sheets inherently have an aluminum oxide portion due to the sheets exposure to air as evidenced by Frank et al (2,854,074) in column 1, line 27-29; the portions of the aluminum sheet that are exposed to air and have aluminum oxide on them are considered to be distinct portions; the aluminum portion of the sheet is considered to be a distinct aluminum portion; the lubricant is concentrated on the periphery of the die hole where the punch cuts through the aluminum portion as shown in figure 1, and each location about the periphery of the die hole is considered to be a specific predetermined location on the periphery of the die hole.

Tsubota does not teach the die hole having an open upper end and defining a periphery around the open end; and delivering a lubricant to the periphery of the open upper end of the die hole.

Lyon teaches a die hole having an open upper end 37 and defining a periphery around the open end; and delivering a lubricant to the periphery of the open upper end of the die hole for reducing heat. See Fig. 1.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to incorporate an open upper end as taught by Lyon to the Tsubota's die for delivering lubricant to a workpiece to reduce heat.

It is to be noted that when the workpiece has an irregular shape, the concentration of the lubricant along the periphery of the workpiece will be different. Some portions of the periphery have more concentration of lubricant than others.

3. Claims 11 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubota (5,361,660) in view of Lyon (2,821,156) as applied to claims 10 and 65 above, and further in view of Klint et al (3,288,715), hereafter Klint.

Tsubota discloses everything as noted above, but does not disclose delivering a partially fluorinated fluid, however, Klint teaches delivering a partially fluorinated fluid in column 2, lines 2-4.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to deliver a partially fluorinated fluid in Tsubota as taught by Klint in order to obtain a bright surface on the fabricated aluminum.

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4. Claim 57 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsubota (5,361,660) in view of Lyon (2,821,156) as applied to claim 10 above, and further in view of 3M.

Tsubota discloses everything, but the partially fluorinated fluid is not Fluorinert fluid, however, 3M teaches the advantages of delivering Fluorinert fluid.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to deliver a Fluorinert fluid in Tsubota and Klint as taught by 3M in order to use a lubricant that does not contribute to ground-level smog formation.

#### ***Response to Arguments***

5. Applicant's arguments filed 01/06/2009 have been fully considered but they are not persuasive.

The Applicant argues that the combination of Tsubota and Lyon does not teach the lubricant unevenly concentrating at a specified pre-determined location on the periphery of the open upper end of the die. This argument is not persuasive. The workpiece may have a shape other than circular, for example, a rectangular shape. Each edge of the rectangle is a specified predetermined location. A groove along the long side of the rectangle will hold more lubricant (higher concentration) than a groove along the short side. Therefore, the combination of Tsubota and Lyon reads on the limitation of the lubricant unevenly concentrating at a specified pre-determined location on the periphery of the open upper end of the die. The Applicant needs to describe the claimed groove and reservoir in more detail in order to overcome the combination of Tsubota and Lyon.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHONG H. NGUYEN whose telephone number is (571)272-4510. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy V Eley/  
Primary Examiner, Art Unit 3724

/P. H. N./  
Examiner, Art Unit 3724  
March 31, 2009